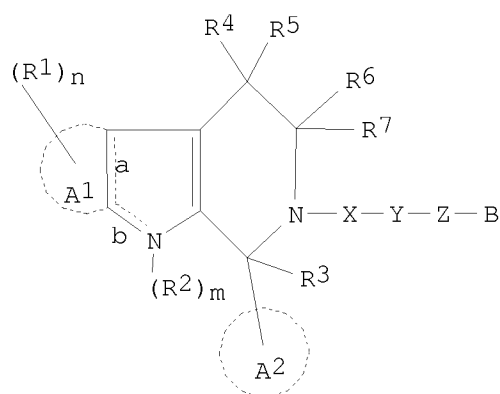


=&gt; s 13

L4 3 L3

=&gt; d abs fbib hitstr 1-3

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN  
GI



I

AB The title compds. I [R1 = H, substituent; n = integer of 1 to 8; when n  $\geq$  2, the R1 substituents may be the same or different; two R1 substituents may together form an (un)substituted cyclic moiety; R2 - R7 = H, substituent; or CR4R5 or CR6R7 = (un)substituted cyclic moiety; ring A1 = monocyclic carbocyclic ring, monocyclic heterocyclic ring; ring A2 = (un)substituted cyclic moiety; B = H, (un)substituted hydrocarbon, (un)substituted cyclic moiety; X, Z = bond, (un)substituted alkylene, (un)substituted alkenylene, etc.; Y = bond, CO, CS, etc.; m = 0 or 1; the dotted line indicates a single bond or a double bond; a and b do not indicate a double bond at the same time; when m is 0, b indicates a double bond; when m is 1, b indicates a single bond] are prepared. Thus, 2-acetyl-1-(1,3-benzodioxol-5-yl)-1,2,3,9-tetrahydrospiro[ $\beta$ -carboline-4,1'-cyclopropane] was prepared in a multistep process from 1H-indol-3-ylacetonitrile and 1-bromo-2-chloroethane. In an assay for affinity for the mitochondrial benzodiazepine receptors, one compound of this invention showed the Ki value of 0.08 nM.

AN 2006:632779 CAPLUS

DN 145:103651

TI Preparation of tricyclic compounds with affinity for mitochondrial benzodiazepine receptors as agents for prevention and treatment of diseases caused by stress

IN Ohmoto, Kazuyuki; Kato, Masashi; Kagamiishi, Yoshifumi; Manako, Junichiro

PA Ono Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 190 pp.

CODEN: PIXXD2

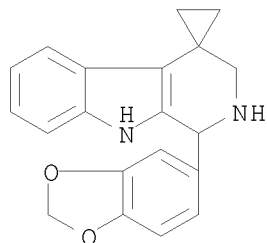
DT Patent

LA Japanese

10561973

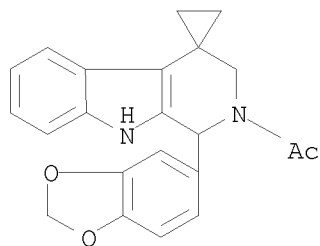
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006068164	A1	20060629	WO 2005-JP23450	20051221
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
				JP 2004-371033	A 20041222
				JP 2005-261914	A 20050909
	EP 1829874	A1	20070905	EP 2005-820106	20051221
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
				JP 2004-371033	A 20041222
				JP 2005-261914	A 20050909
				WO 2005-JP23450	W 20051221
	US 20080114012	A1	20080515	US 2007-722623	20070622
				JP 2004-371033	A 20041222
				JP 2005-261914	A 20050909
				WO 2005-JP23450	W 20051221
OS	MARPAT 145:103651				
IT	895167-92-7P 895167-93-8P 895168-53-3P				
	RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)				
	(preparation of tricyclic compds. with affinity for mitochondrial benzodiazepine receptors as agents for prevention and treatment of diseases caused by stress)				
RN	895167-92-7 CAPLUS				
CN	Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole], 1'-(1,3-benzodioxol-5-yl)-1',2',3',9'-tetrahydro- (CA INDEX NAME)				



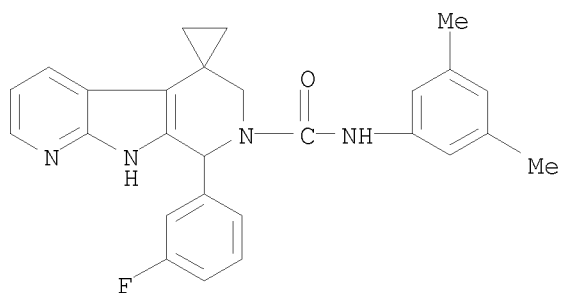
RN 895167-93-8 CAPLUS

CN Ethanone, 1-[1'-(1,3-benzodioxol-5-yl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895168-53-3 CAPLUS

CN Spiro[cyclopropane-1,5'-[5H]pyrido[4',3':4,5]pyrrolo[2,3-b]pyridine]-7'(6'H)-carboxamide, N-(3,5-dimethylphenyl)-8'-(3-fluorophenyl)-8',9'-dihydro- (CA INDEX NAME)



IT 816428-14-5P 816428-46-3P 895167-94-9P  
 895167-95-0P 895167-96-1P 895167-97-2P  
 895167-98-3P 895167-99-4P 895168-00-0P  
 895168-01-1P 895168-02-2P 895168-03-3P  
 895168-04-4P 895168-05-5P 895168-06-6P  
 895168-07-7P 895168-08-8P 895168-09-9P  
 895168-10-2P 895168-11-3P 895168-12-4P  
 895168-13-5P 895168-14-6P 895168-15-7P  
 895168-16-8P 895168-17-9P 895168-18-0P  
 895168-19-1P 895168-20-4P 895168-21-5P  
 895168-22-6P 895168-23-7P 895168-24-8P  
 895168-25-9P 895168-26-0P 895168-27-1P  
 895168-28-2P 895168-29-3P 895168-30-6P  
 895168-31-7P 895168-32-8P 895168-33-9P  
 895168-34-0P 895168-54-4P 895168-55-5P  
 895168-56-6P 895168-70-4P 895168-71-5P  
 895168-74-8P 895168-75-9P 895168-92-0P  
 895168-93-1P 895168-94-2P 895168-95-3P  
 895168-96-4P 895168-97-5P 895168-98-6P  
 895168-99-7P 895169-00-3P 895169-01-4P  
 895169-02-5P 895169-03-6P 895169-04-7P  
 895169-05-8P 895169-06-9P 895169-07-0P  
 895169-08-1P 895169-09-2P 895169-10-5P  
 895169-11-6P 895169-12-7P 895169-13-8P  
 895169-14-9P 895169-15-0P 895169-16-1P

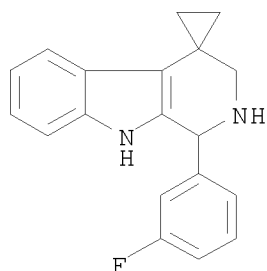
895169-17-2P 895169-18-3P 895169-19-4P  
 895169-20-7P 895169-21-8P 895169-22-9P  
 895169-23-0P 895169-24-1P 895169-25-2P  
 895169-26-3P 895169-27-4P 895169-28-5P  
 895169-29-6P 895169-30-9P 895169-31-0P  
 895169-32-1P 895169-33-2P 895169-34-3P  
 895169-35-4P 895169-36-5P 895169-37-6P  
 895169-38-7P 895169-39-8P 895169-40-1P  
 895169-41-2P 895169-42-3P 895169-43-4P  
 895169-44-5P 895169-45-6P 895169-46-7P  
 895169-47-8P 895169-48-9P 895169-49-0P  
 895169-50-3P 895169-51-4P 895169-52-5P  
 895169-55-8P 895169-56-9P 895169-57-0P  
 895169-58-1P 895169-60-5P 896106-17-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of tricyclic compds. with affinity for mitochondrial benzodiazepine receptors as agents for prevention and treatment of diseases caused by stress)

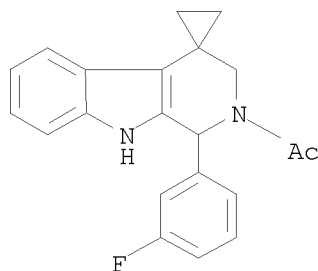
RN 816428-14-5 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole],  
 1'-(3-fluorophenyl)-1',2',3',9'-tetrahydro- (CA INDEX NAME)



RN 816428-46-3 CAPLUS

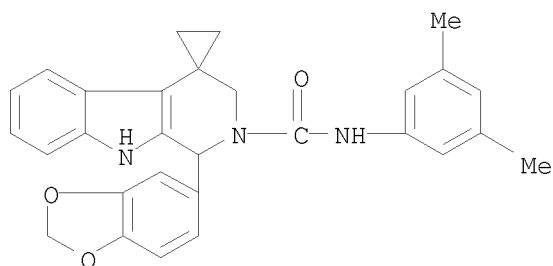
CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895167-94-9 CAPLUS

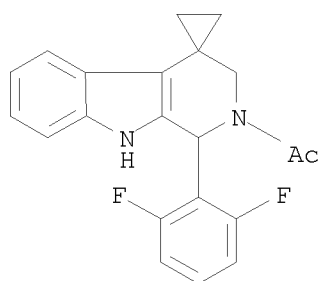
CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide,

1'-((1,3-benzodioxol-5-yl)-N-(3,5-dimethylphenyl)-1',9'-dihydro- (CA INDEX NAME)



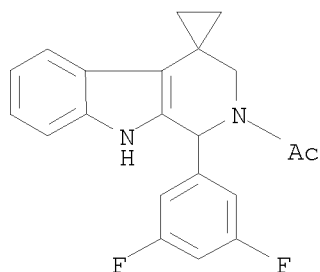
RN 895167-95-0 CAPLUS

CN Ethanone, 1-[1'-(2,6-difluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



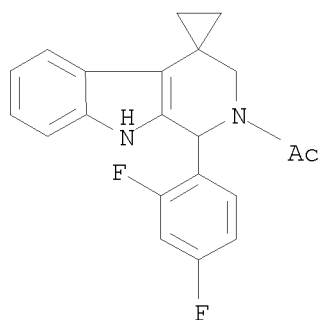
RN 895167-96-1 CAPLUS

CN Ethanone, 1-[1'-(3,5-difluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



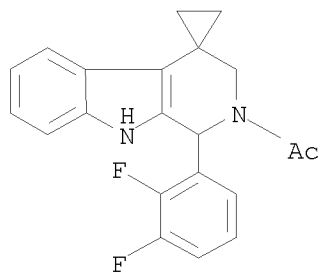
RN 895167-97-2 CAPLUS

CN Ethanone, 1-[1'-(2,4-difluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



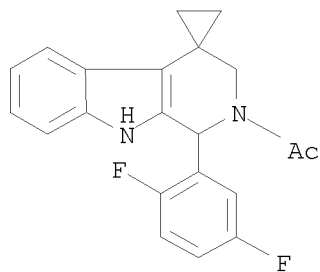
RN 895167-98-3 CAPLUS

CN Ethanone, 1-[1'-(2,3-difluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



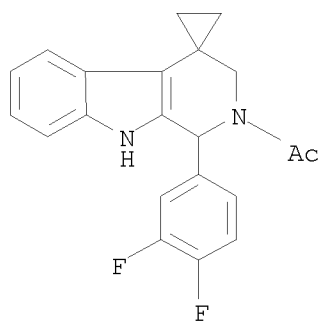
RN 895167-99-4 CAPLUS

CN Ethanone, 1-[1'-(2,5-difluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



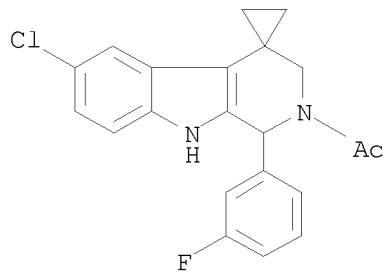
RN 895168-00-0 CAPLUS

CN Ethanone, 1-[1'-(3,4-difluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



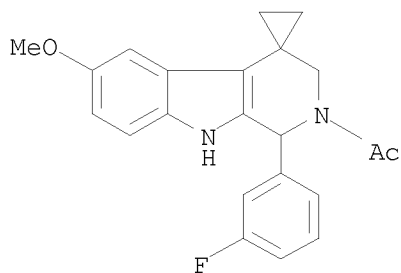
RN 895168-01-1 CAPLUS

CN Ethanone, 1-[6'-chloro-1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



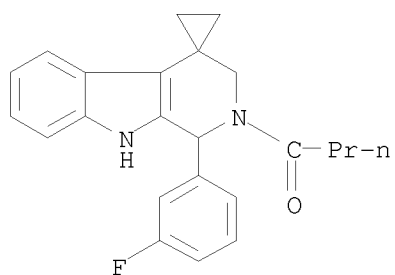
RN 895168-02-2 CAPLUS

CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydro-6'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



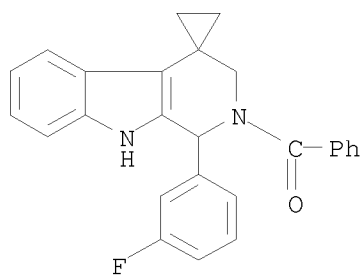
RN 895168-03-3 CAPLUS

CN 1-Butanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



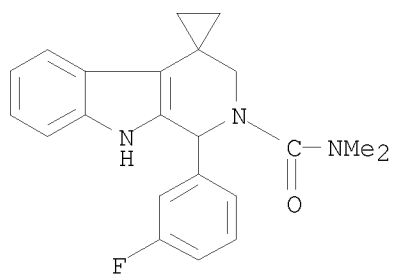
RN 895168-04-4 CAPLUS

CN Methanone, [1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]phenyl- (CA INDEX NAME)



RN 895168-05-5 CAPLUS

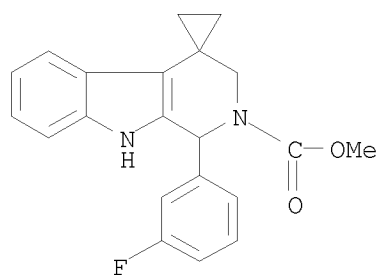
CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide, 1'-(3-fluorophenyl)-1',9'-dihydro-N,N-dimethyl- (CA INDEX NAME)



RN 895168-06-6 CAPLUS

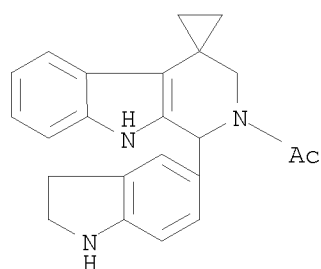
CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxylic acid, 1'-(3-fluorophenyl)-1',9'-dihydro-, methyl ester (CA INDEX NAME)





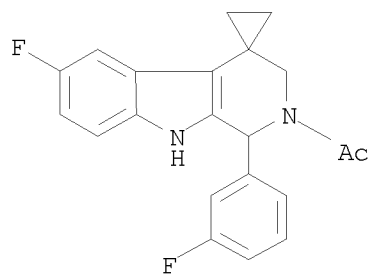
RN 895168-07-7 CAPLUS

CN Ethanone, 1-[1'-(2,3-dihydro-1H-indol-5-yl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



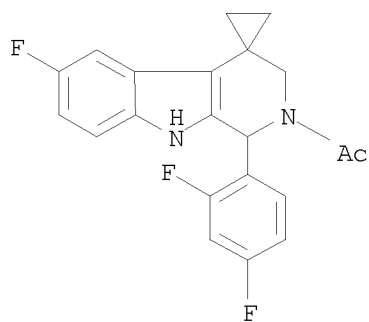
RN 895168-08-8 CAPLUS

CN Ethanone, 1-[6'-fluoro-1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



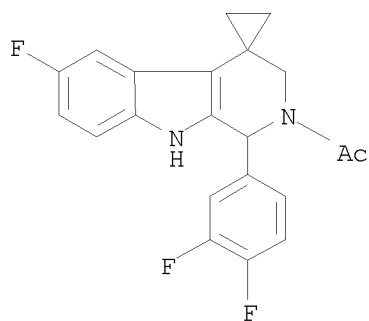
RN 895168-09-9 CAPLUS

CN Ethanone, 1-[1'-(2,4-difluorophenyl)-6'-fluoro-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



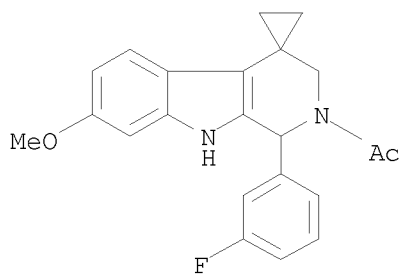
RN 895168-10-2 CAPLUS

CN Ethanone, 1-[1'-(3,4-difluorophenyl)-6'-fluoro-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895168-11-3 CAPLUS

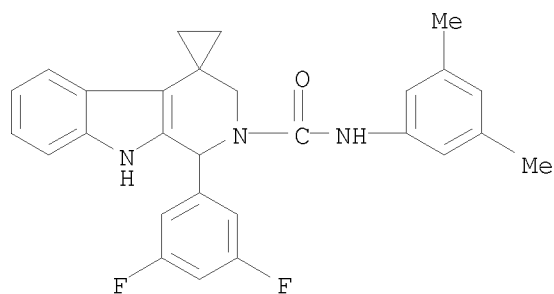
CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydro-7'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895168-12-4 CAPLUS

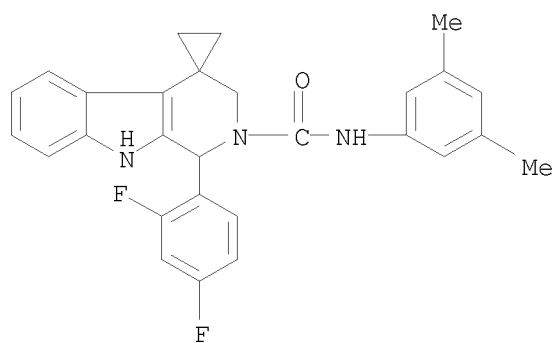
CN Ethanone, 1-[7'-fluoro-1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)





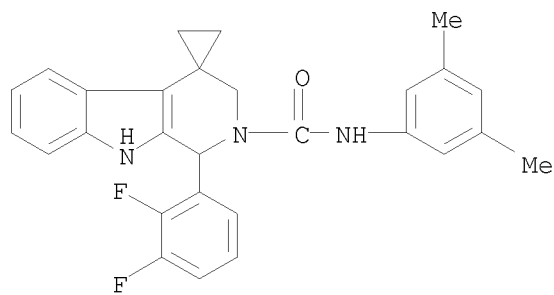
RN 895168-16-8 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide,  
1'-(2,4-difluorophenyl)-N-(3,5-dimethylphenyl)-1',9'-dihydro- (CA INDEX  
NAME)



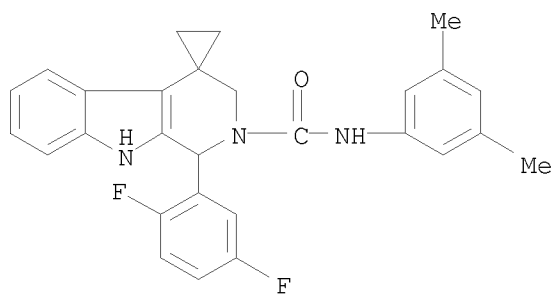
RN 895168-17-9 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide,  
1'-(2,3-difluorophenyl)-N-(3,5-dimethylphenyl)-1',9'-dihydro- (CA INDEX  
NAME)



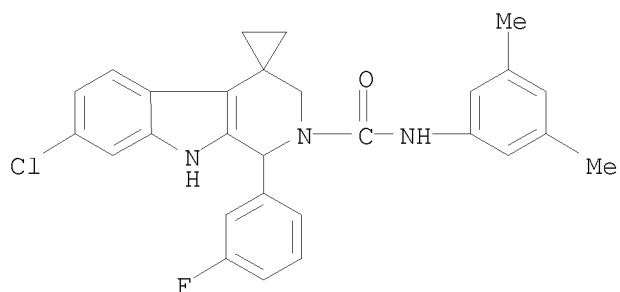
RN 895168-18-0 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide,  
1'-(2,5-difluorophenyl)-N-(3,5-dimethylphenyl)-1',9'-dihydro- (CA INDEX  
NAME)



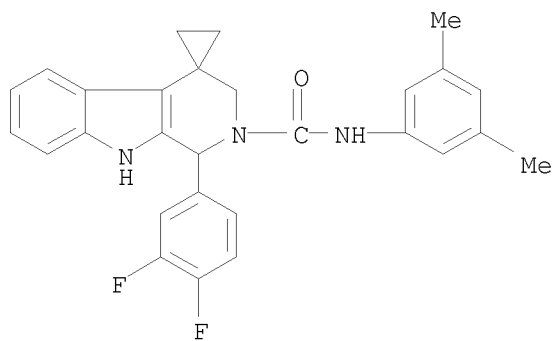
RN 895168-19-1 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide,  
7'-chloro-N-(3,5-dimethylphenyl)-1'-(3-fluorophenyl)-1',9'-dihydro- (CA  
INDEX NAME)



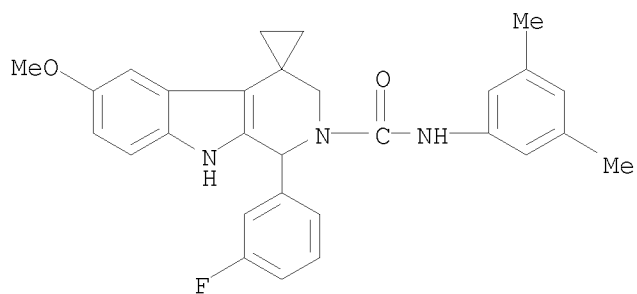
RN 895168-20-4 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide,  
1'-(3,4-difluorophenyl)-N-(3,5-dimethylphenyl)-1',9'-dihydro- (CA INDEX  
NAME)



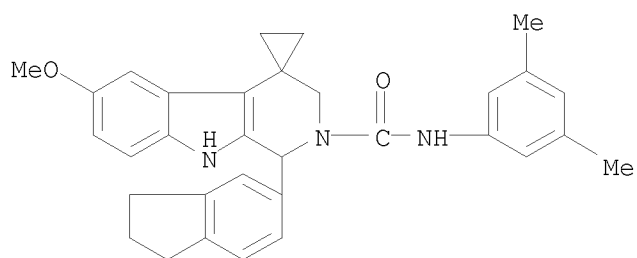
RN 895168-21-5 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide,  
N-(3,5-dimethylphenyl)-1'-(3-fluorophenyl)-1',9'-dihydro-6'-methoxy- (CA  
INDEX NAME)



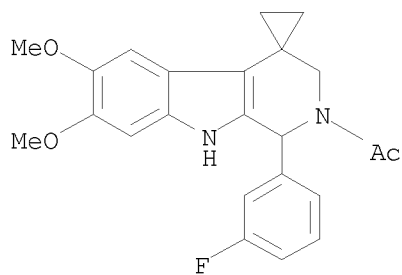
RN 895168-22-6 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide, 1'-(2,3-dihydro-1H-inden-5-yl)-N-(3,5-dimethylphenyl)-1',9'-dihydro-6'-methoxy- (CA INDEX NAME)



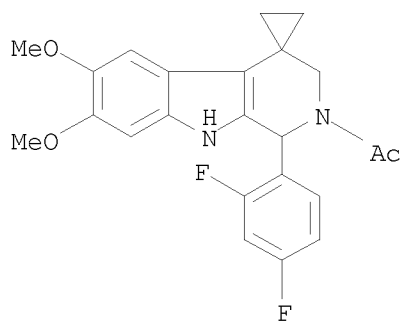
RN 895168-23-7 CAPLUS

CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydro-6',7'-dimethoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



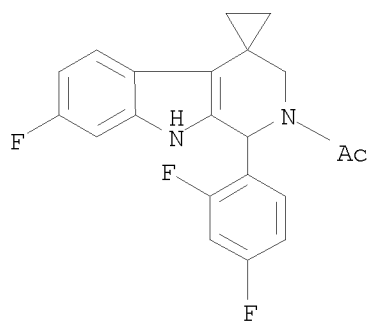
RN 895168-24-8 CAPLUS

CN Ethanone, 1-[1'-(2,4-difluorophenyl)-1',2',3',9'-tetrahydro-6',7'-dimethoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



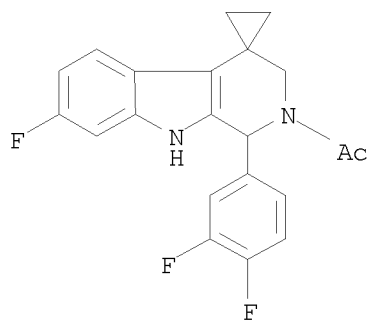
RN 895168-25-9 CAPLUS

CN Ethanone, 1-[1'-(2,4-difluorophenyl)-7'-fluoro-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



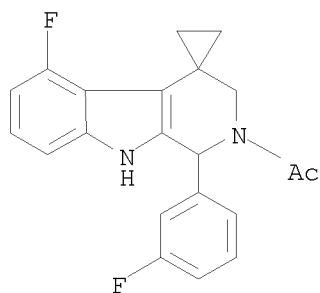
RN 895168-26-0 CAPLUS

CN Ethanone, 1-[1'-(3,4-difluorophenyl)-7'-fluoro-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



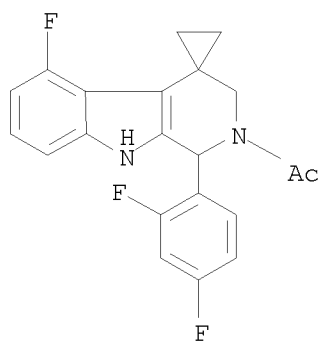
RN 895168-27-1 CAPLUS

CN Ethanone, 1-[5'-fluoro-1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



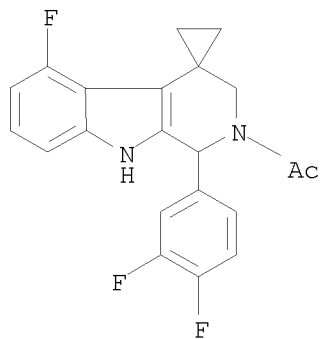
RN 895168-28-2 CAPLUS

CN Ethanone, 1-[1'-(2,4-difluorophenyl)-5'-fluoro-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895168-29-3 CAPLUS

CN Ethanone, 1-[1'-(3,4-difluorophenyl)-5'-fluoro-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)

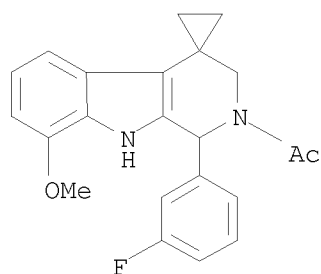


RN 895168-30-6 CAPLUS

CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydro-8'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)

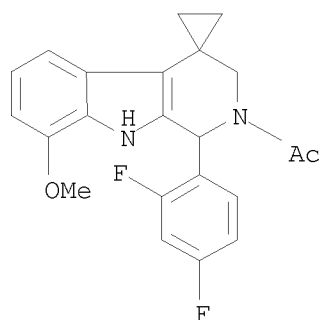


NAME)



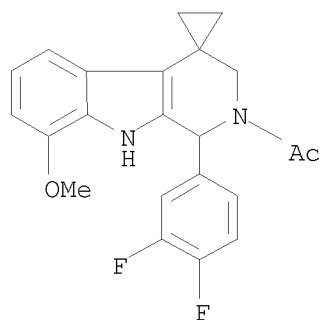
RN 895168-31-7 CAPLUS

CN Ethanone, 1-[1'-(2,4-difluorophenyl)-1',2',3',9'-tetrahydro-8'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895168-32-8 CAPLUS

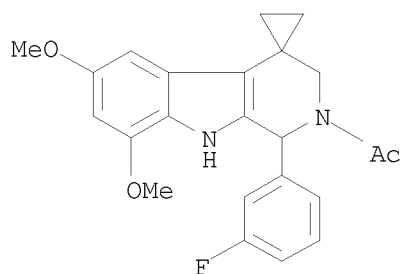
CN Ethanone, 1-[1'-(3,4-difluorophenyl)-1',2',3',9'-tetrahydro-8'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895168-33-9 CAPLUS

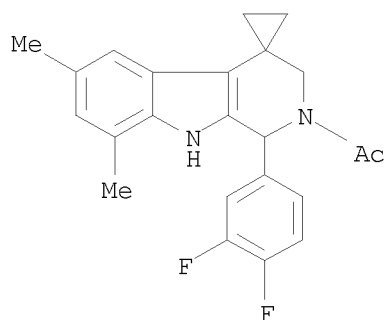
CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydro-6',8'-dimethoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA

INDEX NAME)



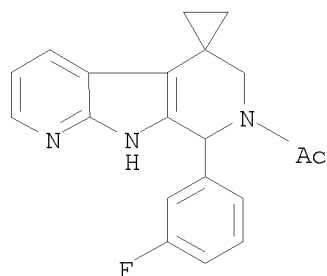
RN 895168-34-0 CAPLUS

CN Ethanone, 1-[1'-(3,4-difluorophenyl)-1',2',3',9'-tetrahydro-6',8'-dimethylspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



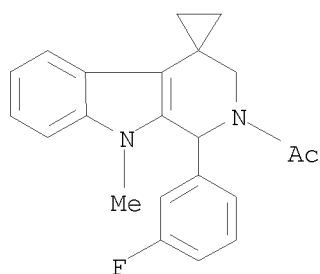
RN 895168-54-4 CAPLUS

CN Ethanone, 1-[8'-(3-fluorophenyl)-6',7',8',9'-tetrahydrospiro[cyclopropane-1,5'-[5H]pyrido[4',3':4,5]pyrrolo[2,3-b]pyridin]-7'-yl]- (CA INDEX NAME)



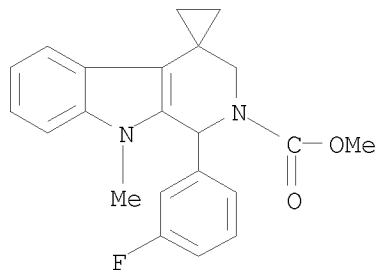
RN 895168-55-5 CAPLUS

CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydro-9'-methylspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895168-56-6 CAPLUS

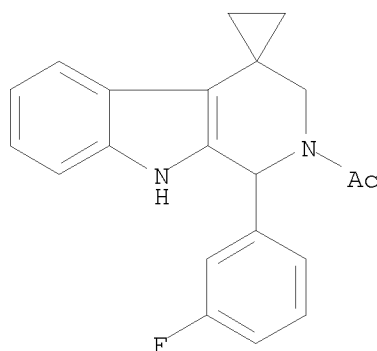
CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxylic acid, 1'-(3-fluorophenyl)-1',9'-dihydro-9'-methyl-, methyl ester (CA INDEX NAME)



RN 895168-70-4 CAPLUS

CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)- (CA INDEX NAME)

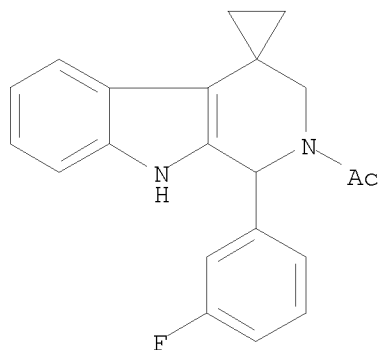
Rotation (+).



RN 895168-71-5 CAPLUS

CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (-)- (CA INDEX NAME)

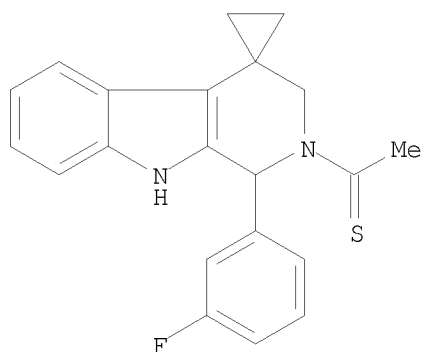
Rotation (-).



RN 895168-74-8 CAPLUS

CN Ethanethione, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (-)-(CA INDEX NAME)

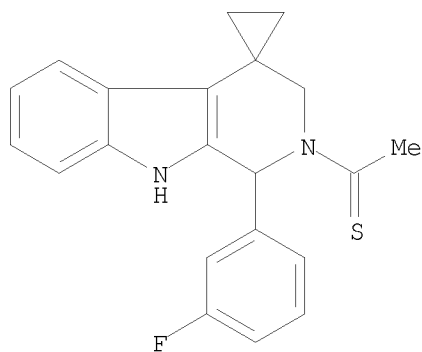
Rotation (-).



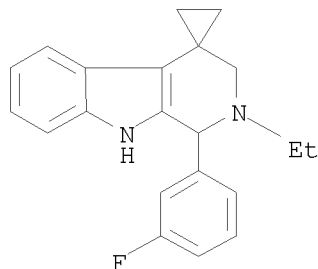
RN 895168-75-9 CAPLUS

CN Ethanethione, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)-(CA INDEX NAME)

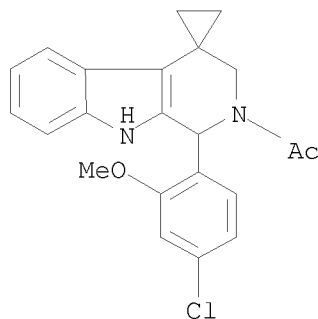
Rotation (+).



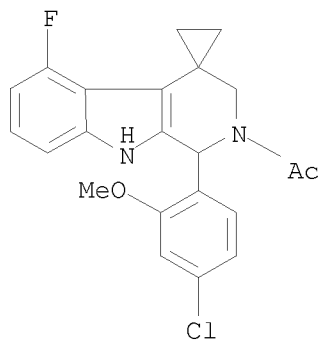
RN 895168-92-0 CAPLUS  
CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole],  
2'-ethyl-1'-(3-fluorophenyl)-1',2',3',9'-tetrahydro- (CA INDEX NAME)



RN 895168-93-1 CAPLUS  
CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-  
tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA  
INDEX NAME)

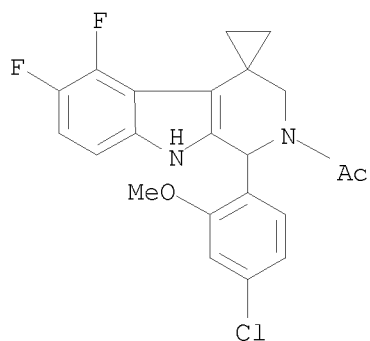


RN 895168-94-2 CAPLUS  
CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-5'-fluoro-1',2',3',9'-  
tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA  
INDEX NAME)



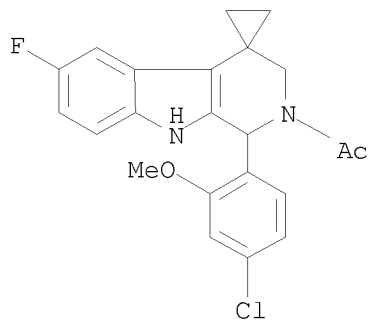
RN 895168-95-3 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-5',6'-difluoro-1',2',3',9'-  
tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA  
INDEX NAME)



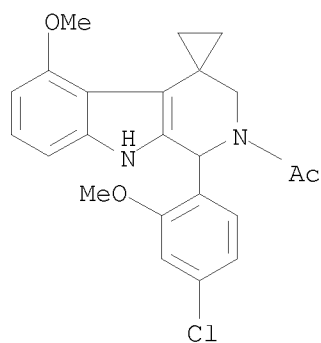
RN 895168-96-4 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-6'-fluoro-1',2',3',9'-  
tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA  
INDEX NAME)



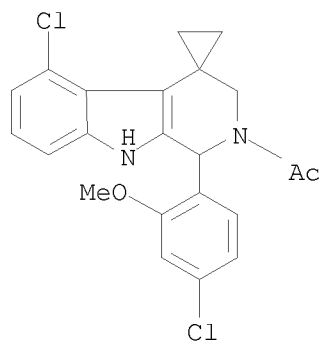
RN 895168-97-5 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-5'-  
methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX  
NAME)



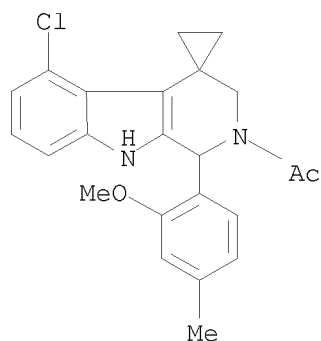
RN 895168-98-6 CAPLUS

CN Ethanone, 1-[5'-chloro-1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895168-99-7 CAPLUS

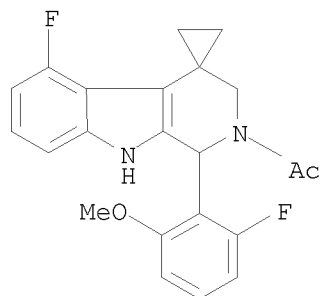
CN Ethanone, 1-[5'-chloro-1',2',3',9'-tetrahydro-1'-(2-methoxy-4-methylphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895169-00-3 CAPLUS

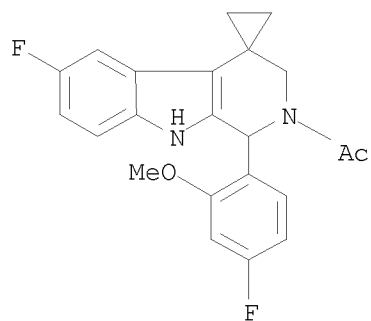
CN Ethanone, 1-[5'-fluoro-1'-(2-fluoro-6-methoxyphenyl)-1',2',3',9'-

tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA  
INDEX NAME)



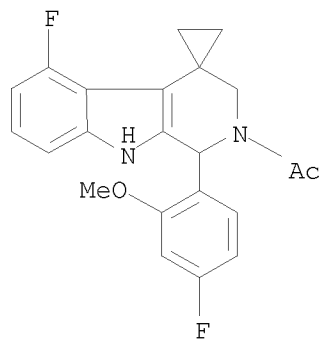
RN 895169-01-4 CAPLUS

CN Ethanone, 1-[6'-fluoro-1'-(4-fluoro-2-methoxyphenyl)-1',2',3',9'-  
tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA  
INDEX NAME)



RN 895169-02-5 CAPLUS

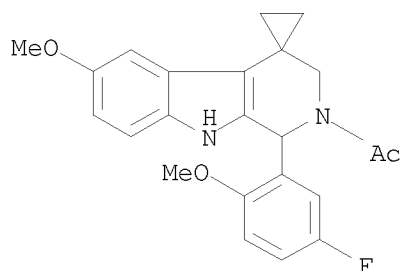
CN Ethanone, 1-[5'-fluoro-1'-(4-fluoro-2-methoxyphenyl)-1',2',3',9'-  
tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA  
INDEX NAME)





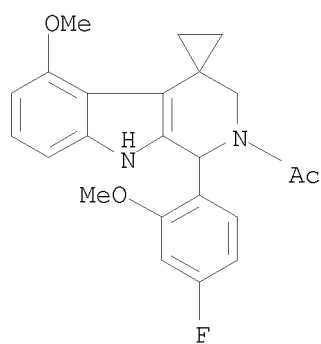
RN 895169-03-6 CAPLUS

CN Ethanone, 1-[1'-(5-fluoro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-6'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



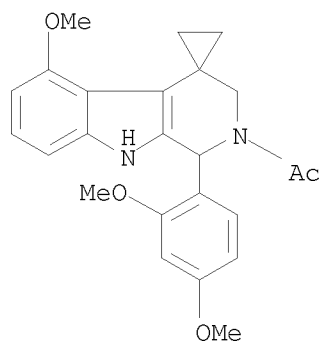
RN 895169-04-7 CAPLUS

CN Ethanone, 1-[1'-(4-fluoro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-5'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895169-05-8 CAPLUS

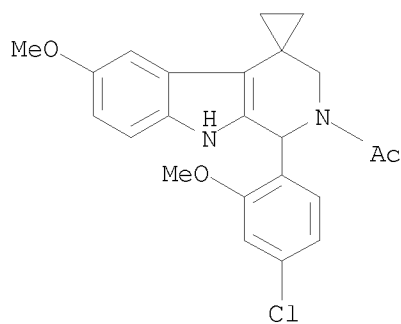
CN Ethanone, 1-[1'-(2,4-dimethoxyphenyl)-1',2',3',9'-tetrahydro-5'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)





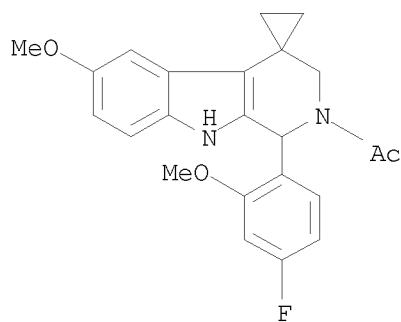
RN 895169-09-2 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-6'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



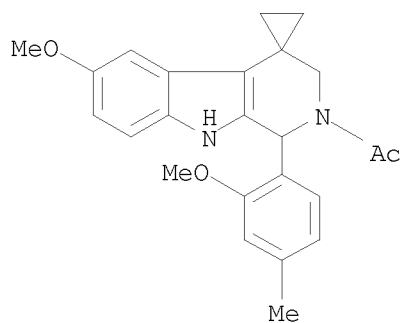
RN 895169-10-5 CAPLUS

CN Ethanone, 1-[1'-(4-fluoro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-6'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



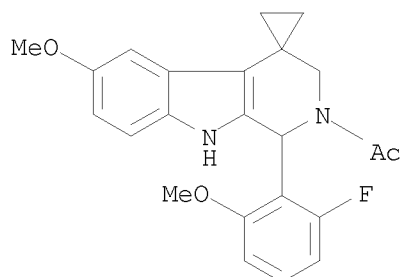
RN 895169-11-6 CAPLUS

CN Ethanone, 1-[1',2',3',9'-tetrahydro-6'-methoxy-1'-(2-methoxy-4-methylphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



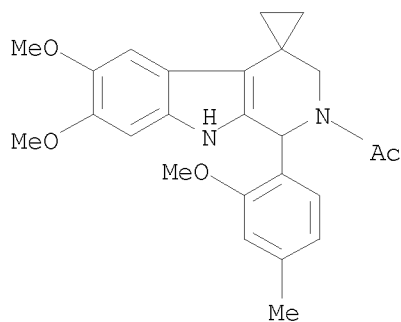
RN 895169-12-7 CAPLUS

CN Ethanone, 1-[1'-(2-fluoro-6-methoxyphenyl)-1',2',3',9'-tetrahydro-6'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



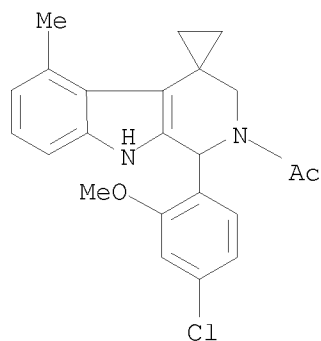
RN 895169-13-8 CAPLUS

CN Ethanone, 1-[1',2',3',9'-tetrahydro-6',7'-dimethoxy-1'-(2-methoxy-4-methylphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



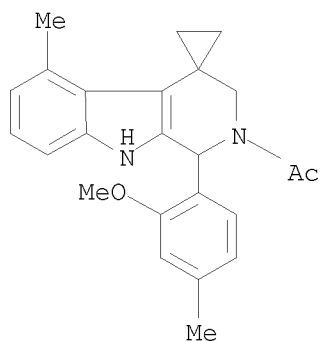
RN 895169-14-9 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-5'-methylspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



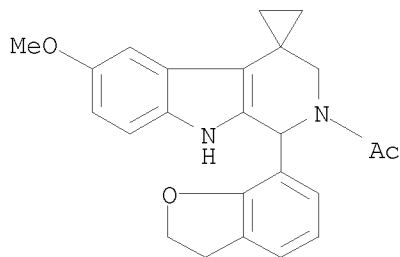
RN 895169-15-0 CAPLUS

CN Ethanone, 1-[1',2',3',9'-tetrahydro-1'-(2-methoxy-4-methylphenyl)-5'-methylspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



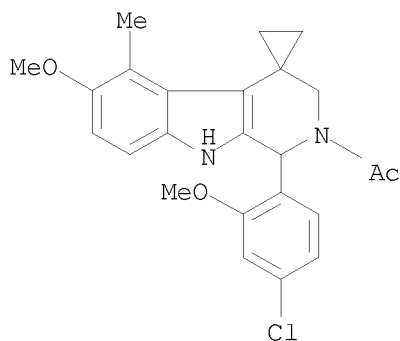
RN 895169-16-1 CAPLUS

CN Ethanone, 1-[1'-(2,3-dihydro-7-benzofuranyl)-1',2',3',9'-tetrahydro-6'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



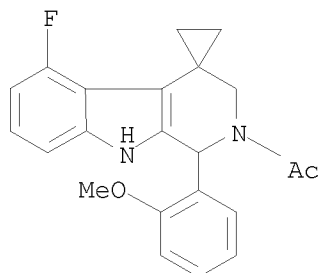
RN 895169-17-2 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-6'-methoxy-5'-methylspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



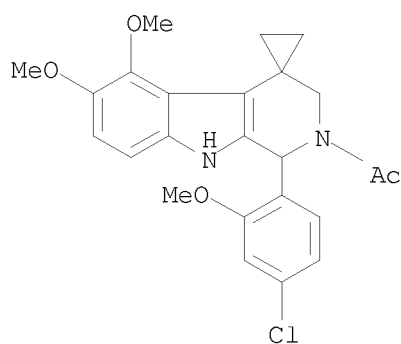
RN 895169-18-3 CAPLUS

CN Ethanone, 1-[5'-fluoro-1',2',3',9'-tetrahydro-1'-(2-methoxyphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895169-19-4 CAPLUS

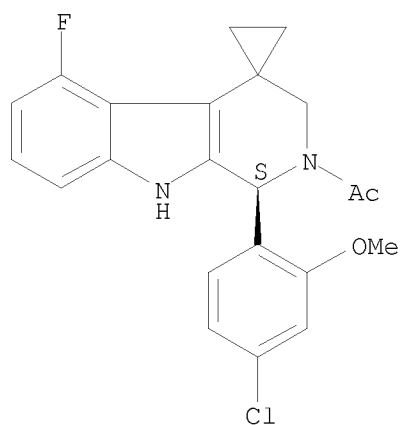
CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-5',6'-dimethoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895169-20-7 CAPLUS

CN Ethanone, 1-[(1'S)-1'-(4-chloro-2-methoxyphenyl)-5'-fluoro-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)

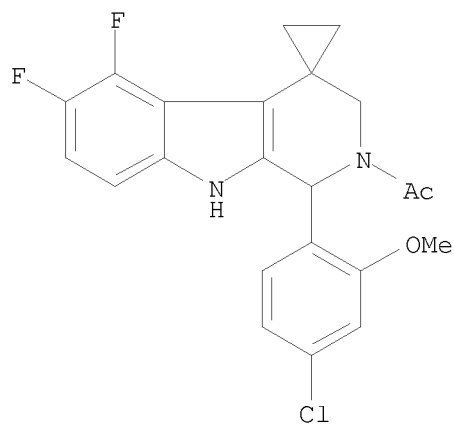
Absolute stereochemistry.



RN 895169-21-8 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-5',6'-difluoro-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (-)-(CA INDEX NAME)

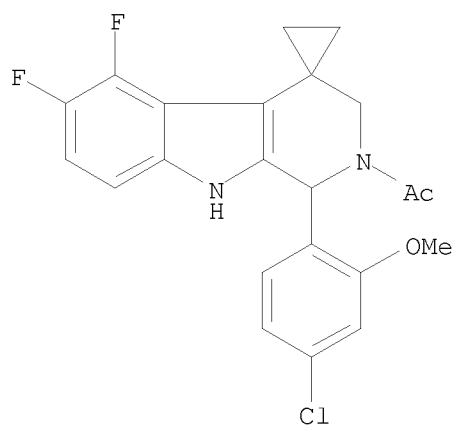
Rotation (-).



RN 895169-22-9 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-5',6'-difluoro-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)-(CA INDEX NAME)

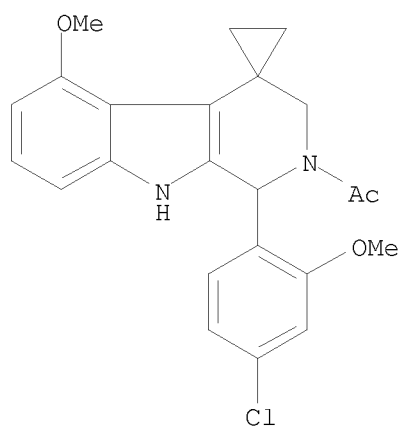
Rotation (+).



RN 895169-23-0 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-5'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)- (CA INDEX NAME)

Rotation (+).

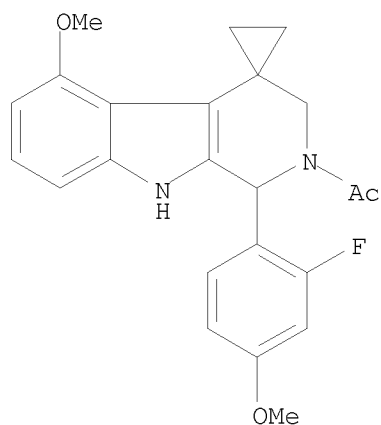


RN 895169-24-1 CAPLUS

CN Ethanone, 1-[1'-(2-fluoro-4-methoxyphenyl)-1',2',3',9'-tetrahydro-5'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)- (CA INDEX NAME)

Rotation (+).

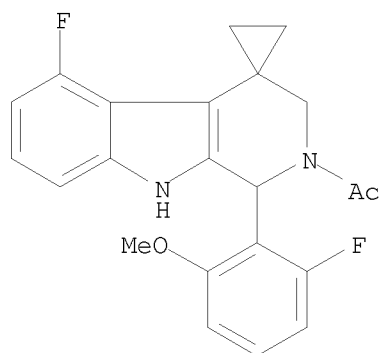




RN 895169-25-2 CAPLUS

CN Ethanone, 1-[5'-fluoro-1'-(2-fluoro-6-methoxyphenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)-(CA INDEX NAME)

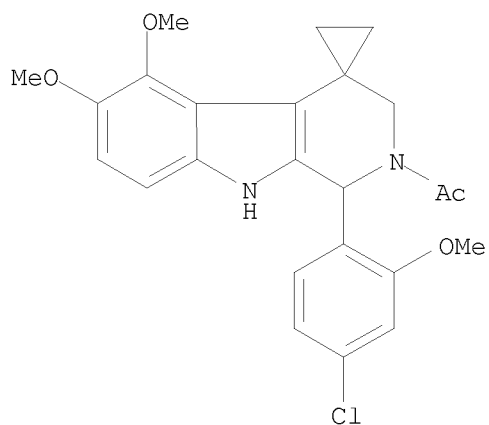
Rotation (+).



RN 895169-26-3 CAPLUS

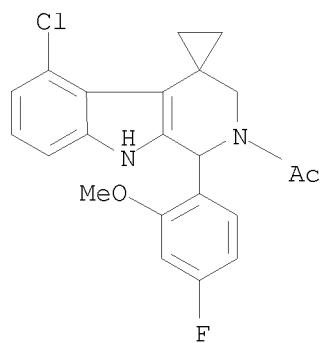
CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-5',6'-dimethoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)-(CA INDEX NAME)

Rotation (+).



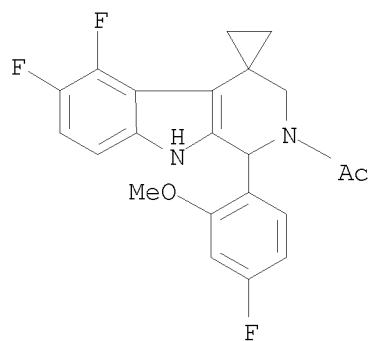
RN 895169-27-4 CAPLUS

CN Ethanone, 1-[5'-chloro-1'-(4-fluoro-2-methoxyphenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



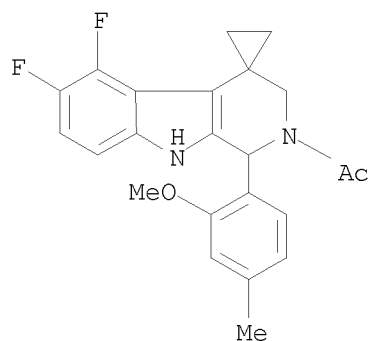
RN 895169-28-5 CAPLUS

CN Ethanone, 1-[5',6'-difluoro-1'-(4-fluoro-2-methoxyphenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



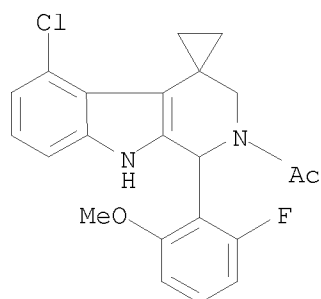
RN 895169-29-6 CAPLUS

CN Ethanone, 1-[5',6'-difluoro-1',2',3',9'-tetrahydro-1'-(2-methoxy-4-methylphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



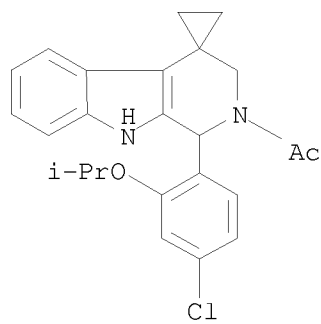
RN 895169-30-9 CAPLUS

CN Ethanone, 1-[5'-chloro-1'-(2-fluoro-6-methoxyphenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



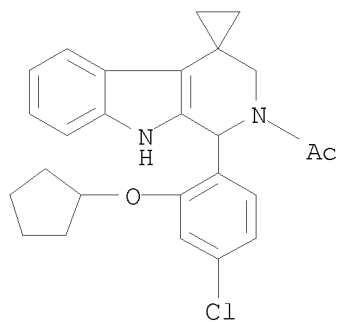
RN 895169-31-0 CAPLUS

CN Ethanone, 1-[1'-[4-chloro-2-(1-methylethoxy)phenyl]-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



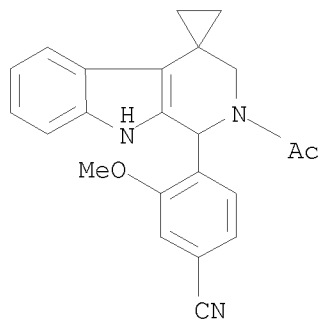
RN 895169-32-1 CAPLUS

CN Ethanone, 1-[1'-[4-chloro-2-(cyclopentyloxy)phenyl]-1',2',3',9'-  
tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA  
INDEX NAME)



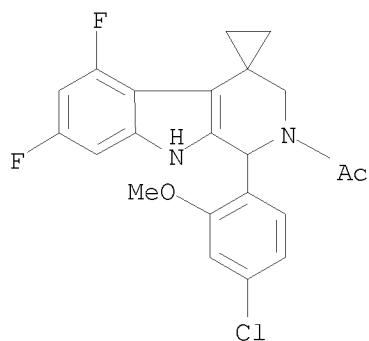
RN 895169-33-2 CAPLUS

CN Benzonitrile, 4-(2'-acetyl-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-  
[4H]pyrido[3,4-b]indol]-1'-yl)-3-methoxy- (CA INDEX NAME)



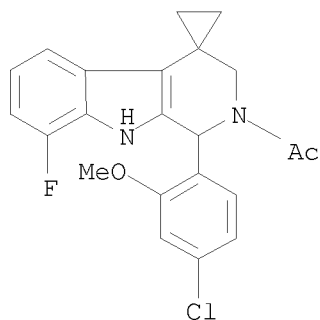
RN 895169-34-3 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-5',7'-difluoro-1',2',3',9'-  
tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA  
INDEX NAME)



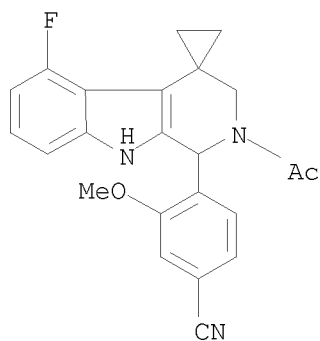
RN 895169-35-4 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-8'-fluoro-1',2',3',9'-  
tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA  
INDEX NAME)



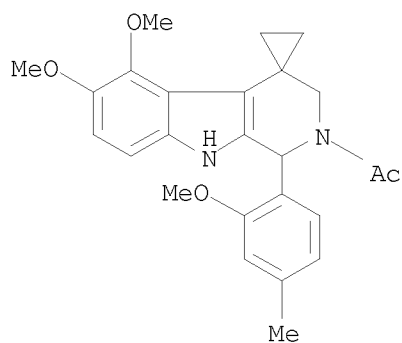
RN 895169-36-5 CAPLUS

CN Benzonitrile, 4-(2'-acetyl-5'-fluoro-1',2',3',9'-  
tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-1'-yl)-3-methoxy-  
(CA INDEX NAME)



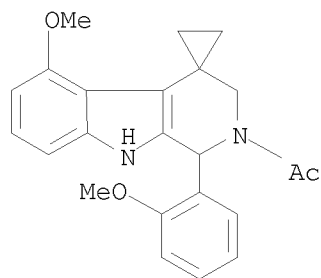
RN 895169-37-6 CAPLUS

CN Ethanone, 1-[1',2',3',9'-tetrahydro-5',6'-dimethoxy-1'-(2-methoxy-4-  
methylphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA  
INDEX NAME)



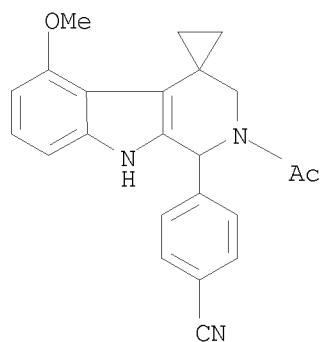
RN 895169-38-7 CAPLUS

CN Ethanone, 1-[1',2',3',9'-tetrahydro-5'-methoxy-1'-(2-methoxyphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



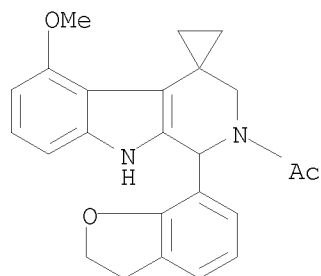
RN 895169-39-8 CAPLUS

CN Benzonitrile, 4-(2'-acetyl-1',2',3',9'-tetrahydro-5'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-1'-yl)- (CA INDEX NAME)



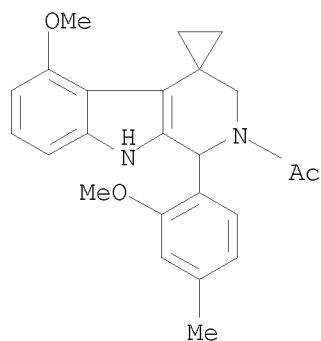
RN 895169-40-1 CAPLUS

CN Ethanone, 1-[1'-(2,3-dihydro-7-benzofuranyl)-1',2',3',9'-tetrahydro-5'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



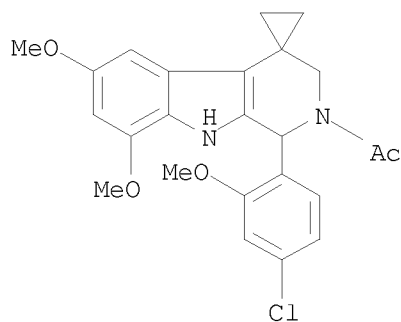
RN 895169-41-2 CAPLUS

CN Ethanone, 1-[1',2',3',9'-tetrahydro-5'-methoxy-1'-(2-methoxy-4-methylphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895169-42-3 CAPLUS

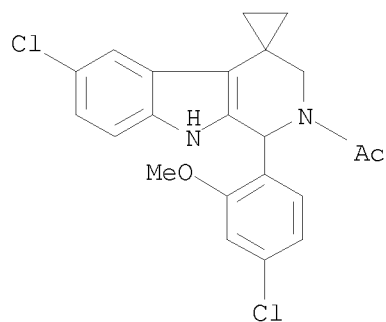
CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-6',8'-dimethoxy-1'-(4-chloro-2-methoxyphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895169-43-4 CAPLUS

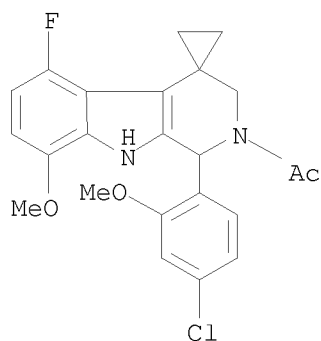
CN Ethanone, 1-[6'-chloro-1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-6',8'-dimethoxy-1'-(4-chloro-2-methoxyphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)

INDEX NAME)



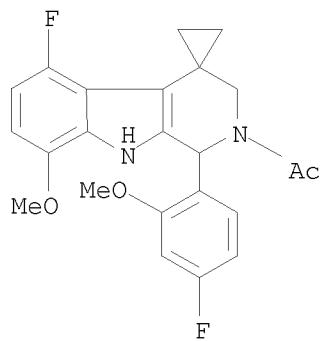
RN 895169-44-5 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-5'-fluoro-1',2',3',9'-  
tetrahydro-8'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-  
yl]- (CA INDEX NAME)



RN 895169-45-6 CAPLUS

CN Ethanone, 1-[5'-fluoro-1'-(4-fluoro-2-methoxyphenyl)-1',2',3',9'-  
tetrahydro-8'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-  
yl]- (CA INDEX NAME)

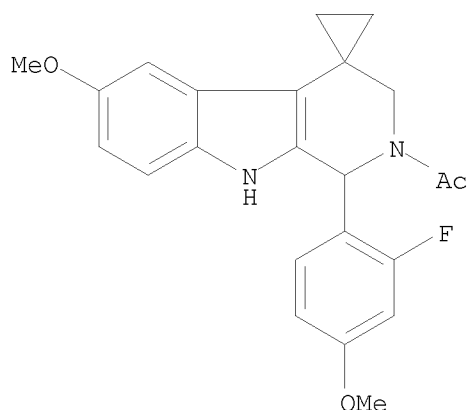




RN 895169-46-7 CAPLUS

CN Ethanone, 1-[1'-(2-fluoro-4-methoxyphenyl)-1',2',3',9'-tetrahydro-6'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)- (CA INDEX NAME)

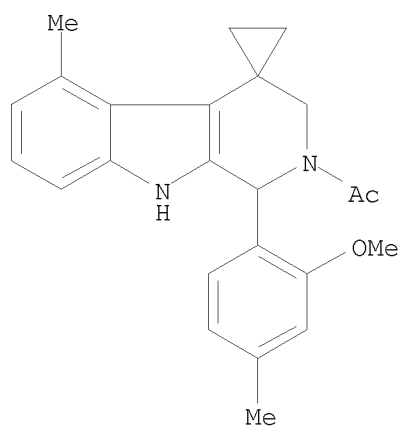
Rotation (+).



RN 895169-47-8 CAPLUS

CN Ethanone, 1-[1'-(2-methoxy-4-methylphenyl)-5'-methylspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)- (CA INDEX NAME)

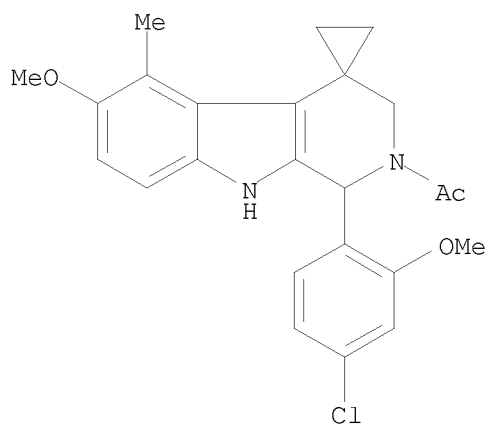
Rotation (+).



RN 895169-48-9 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-6'-methoxy-5'-methylspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)- (CA INDEX NAME)

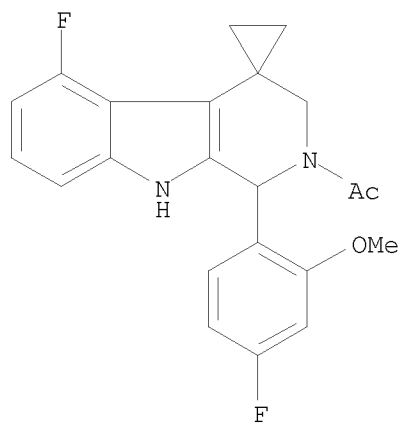
Rotation (+).



RN 895169-49-0 CAPLUS

CN Ethanone, 1-[5'-fluoro-1'-(4-fluoro-2-methoxyphenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)-(CA INDEX NAME)

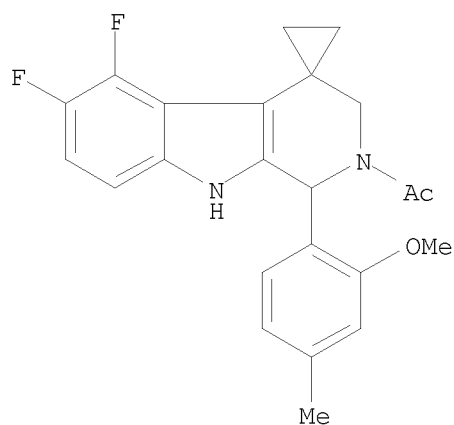
Rotation (+).



RN 895169-50-3 CAPLUS

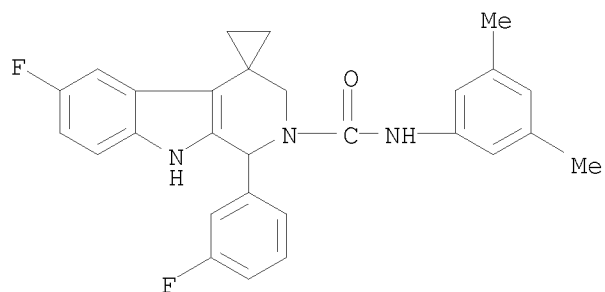
CN Ethanone, 1-[5',6'-difluoro-1',2',3',9'-tetrahydro-1'-(2-methoxy-4-methylphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)-(CA INDEX NAME)

Rotation (+).



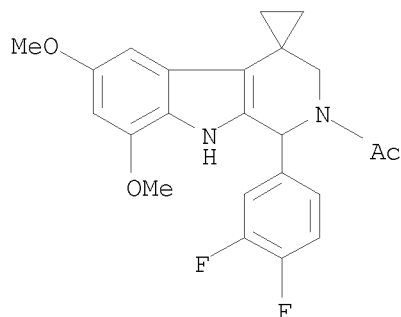
RN 895169-51-4 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide, N-(3,5-dimethylphenyl)-6'-fluoro-1'-(3-fluorophenyl)-1',9'-dihydro- (CA INDEX NAME)



RN 895169-52-5 CAPLUS

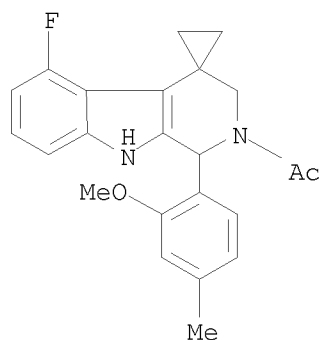
CN Ethanone, 1-[1'-(3,4-difluorophenyl)-1',2',3',9'-tetrahydro-6',8'-dimethoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895169-55-8 CAPLUS

CN Ethanone, 1-[5'-fluoro-1',2',3',9'-tetrahydro-1'-(2-methoxy-4-

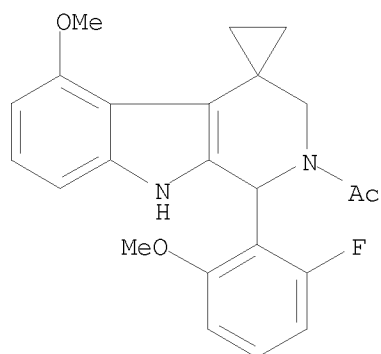
methylphenyl)spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 895169-56-9 CAPLUS

CN Ethanone, 1-[1'-(2-fluoro-6-methoxyphenyl)-1',2',3',9'-tetrahydro-5'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)- (CA INDEX NAME)

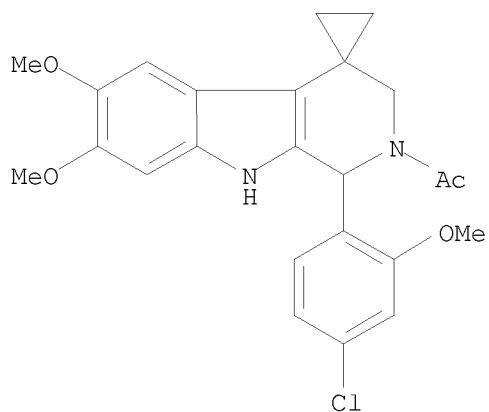
Rotation (+).



RN 895169-57-0 CAPLUS

CN Ethanone, 1-[1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydro-6',7'-dimethoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)- (CA INDEX NAME)

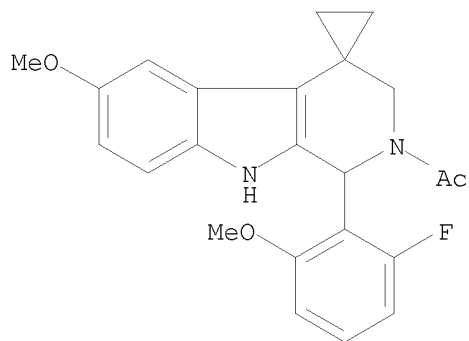
Rotation (+).



RN 895169-58-1 CAPLUS

CN Ethanone, 1-[1'-(2-fluoro-6-methoxyphenyl)-1',2',3',9'-tetrahydro-6'-methoxyspiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)- (CA INDEX NAME)

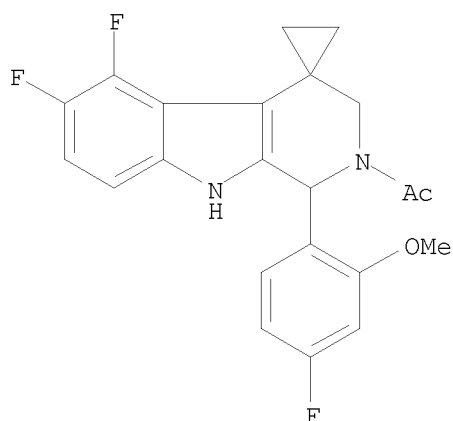
Rotation (+).



RN 895169-60-5 CAPLUS

CN Ethanone, 1-[5',6'-difluoro-1'-(4-fluoro-2-methoxyphenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)- (CA INDEX NAME)

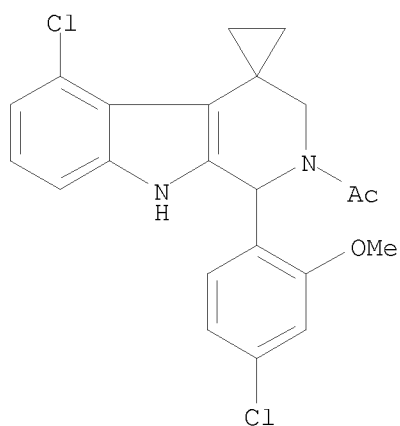
Rotation (+).



RN 896106-17-5 CAPLUS

CN Ethanone, 1-[5'-chloro-1'-(4-chloro-2-methoxyphenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]-, (+)-(CA INDEX NAME)

Rotation (+).



RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN  
GI

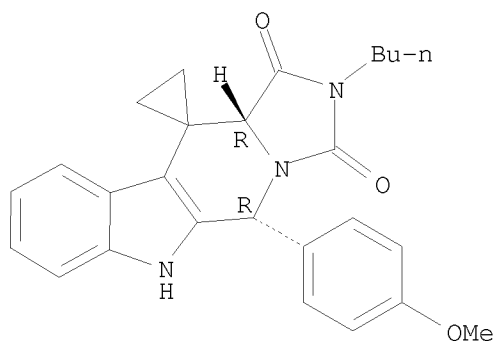
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Indole readily added across the double bond of the highly reactive Michael acceptor Me 2-chloro-2-cyclopropylideneacetate to yield 2-chloro-2-(3'-indolylcyclopropyl)acetate (85%) which was converted in two steps into the racemic tryptophan analog I in 90% yield. This in turn was

transformed by a condensation and Pictet-Spengler sequence into the spirocyclopropane analogs II, III, and IV, of both the natural product (demethoxy)fumitremorgin C (3 steps, 11% yield) and the potent PDE-5 inhibitor Tadalafil (3 steps, 71% yield) as well as the original lead structure with a hydantoin backbone (2 steps, 79% yield).

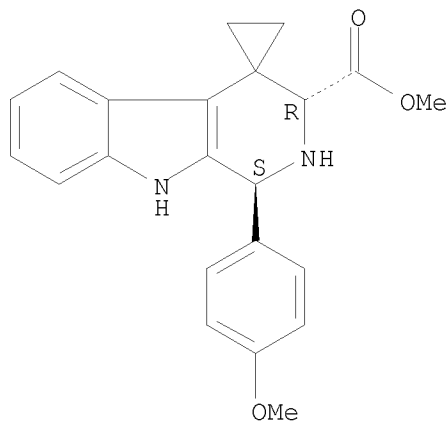
AN 2005:123711 CAPLUS  
 DN 142:355442  
 TI Addition of indole to methyl 2-chloro-2-cyclopropylideneacetate en route to spirocyclopropanated analogues of demethoxyfumitremorgin C and tadalafil  
 AU Limbach, Michael; Dalai, Suryakanta; Janssen, Andre; Es-Sayed, Mazen; Magull, Joerg; De Meijere, Armin  
 CS Institut fuer Organische und Biomolekulare Chemie,  
 Georg-August-Universitaet Goettingen, Goettingen, 37077, Germany  
 SO European Journal of Organic Chemistry (2005), (3), 610-617  
 CODEN: EJOCFK; ISSN: 1434-193X  
 PB Wiley-VCH Verlag GmbH & Co. KGaA  
 DT Journal  
 LA English  
 OS CASREACT 142:355442  
 IT 849109-81-5P  
 RL: PNU (Preparation, unclassified); PREP (Preparation)  
 (addition of indole to Me 2-chloro-2-cyclopropylideneacetate en route to spirocyclopropanated analogs of demethoxyfumitremorgin C and tadalafil)  
 RN 849109-81-5 CAPLUS  
 CN Spiro[cyclopropane-1,11'-[11H]imidazo[1',5':1,6]pyrido[3,4-b]indole]-1',3'-(2'H,11'aH)-dione, 2'-butyl-5',6'-dihydro-5'-(4-methoxyphenyl)-, (5'R,11'aR)- (CA INDEX NAME)

Absolute stereochemistry.



IT 849109-85-9P 849109-86-0P 849109-89-3P  
 849109-93-9P 849109-95-1P 849109-96-2P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (addition of indole to Me 2-chloro-2-cyclopropylideneacetate en route to spirocyclopropanated analogs of demethoxyfumitremorgin C and tadalafil)  
 RN 849109-85-9 CAPLUS  
 CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-3'-carboxylic acid, 1',2',3',9'-tetrahydro-1'-(4-methoxyphenyl)-, methyl ester, (1'R,3'S)-rel- (CA INDEX NAME)

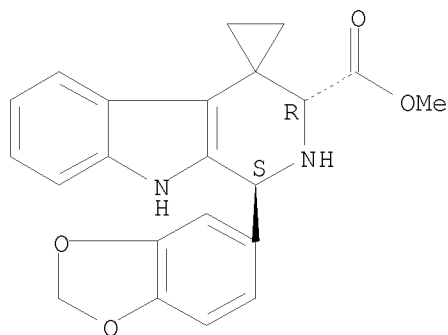
Relative stereochemistry.



RN 849109-86-0 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-3'-carboxylic acid,  
1'-(1,3-benzodioxol-5-yl)-1',2',3',9'-tetrahydro-, methyl ester,  
(1'R,3'S)-rel- (CA INDEX NAME)

Relative stereochemistry.

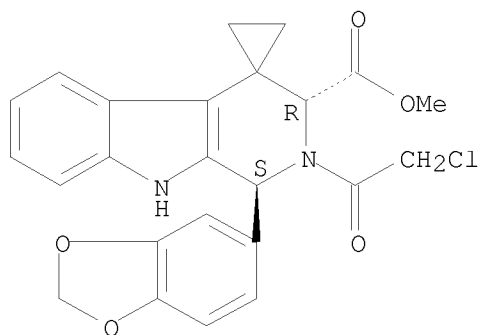


RN 849109-89-3 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-3'-carboxylic acid,  
1'-(1,3-benzodioxol-5-yl)-2'-(2-chloroacetyl)-1',2',3',9'-tetrahydro-,  
methyl ester, (1'R,3'S)-rel- (CA INDEX NAME)

Relative stereochemistry.

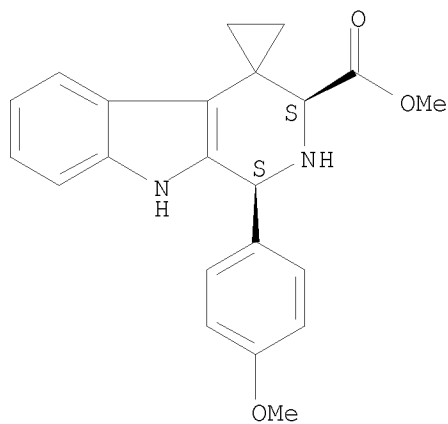




RN 849109-93-9 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-3'-carboxylic acid,  
1',2',3',9'-tetrahydro-1'-(4-methoxyphenyl)-, methyl ester, (1'R,3'R)-rel-  
(CA INDEX NAME)

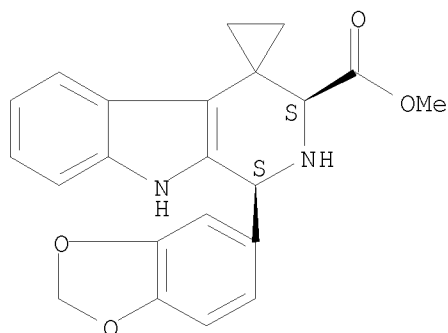
Relative stereochemistry.



RN 849109-95-1 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-3'-carboxylic acid,  
1'-(1,3-benzodioxol-5-yl)-1',2',3',9'-tetrahydro-, methyl ester,  
(1'R,3'R)-rel- (CA INDEX NAME)

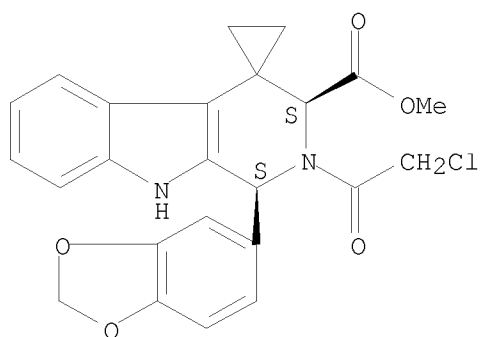
Relative stereochemistry.



RN 849109-96-2 CAPLUS

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-3'-carboxylic acid, 1'-(1,3-benzodioxol-5-yl)-2'-(2-chloroacetyl)-1',2',3',9'-tetrahydro-, methyl ester, (1'R,3'R)-rel- (CA INDEX NAME)

Relative stereochemistry.



IT 849109-88-2P 849109-90-6P 849109-94-0P  
849109-97-3P

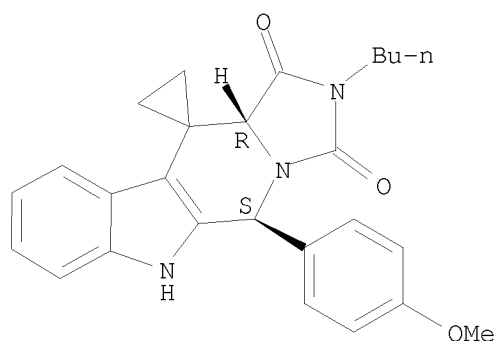
RL: SPN (Synthetic preparation); PREP (Preparation)

(addition of indole to Me 2-chloro-2-cyclopropylideneacetate en route to spirocyclopropanated analogs of demethoxyfunitremorgin C and tadalafil)

RN 849109-88-2 CAPLUS

CN Spiro[cyclopropane-1,11'-[11H]imidazo[1',5':1,6]pyrido[3,4-b]indole]-1',3'-(2'H,11'aH)-dione, 2'-butyl-5',6'-dihydro-5'-(4-methoxyphenyl)-, (5'R,11'aS)-rel- (CA INDEX NAME)

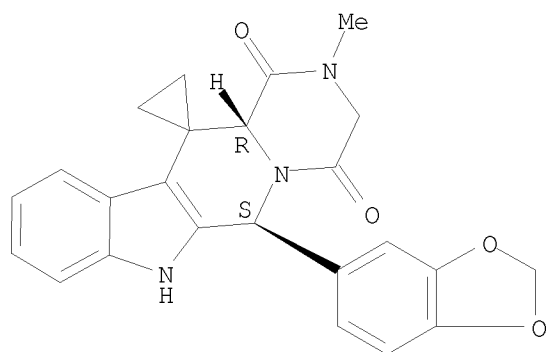
Relative stereochemistry.



RN 849109-90-6 CAPLUS

CN Spiro[cyclopropane-1,12'-(12'aH)-pyrazino[1',2':1,6]pyrido[3,4-b]indole]-1',4'-dione, 6'-(1,3-benzodioxol-5-yl)-2',3',6',7'-tetrahydro-2'-methyl-, (6'R,12'aS)-rel- (CA INDEX NAME)

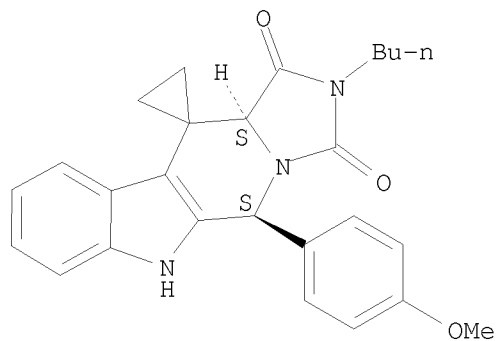
Relative stereochemistry.



RN 849109-94-0 CAPLUS

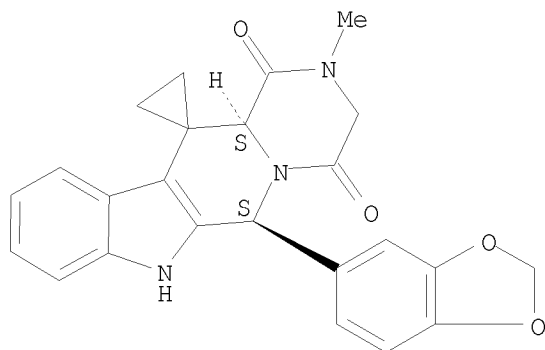
CN Spiro[cyclopropane-1,11'-[11H]imidazo[1',5':1,6]pyrido[3,4-b]indole]-1',3'-(2'H,11'aH)-dione, 2'-butyl-5',6'-dihydro-5'-(4-methoxyphenyl)-, (5'R,11'aR)-rel- (CA INDEX NAME)

Relative stereochemistry.



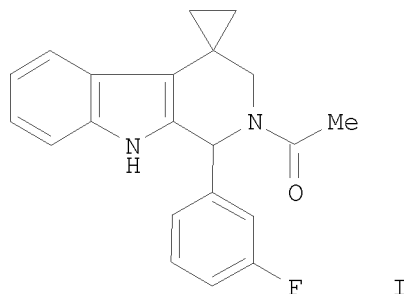
RN 849109-97-3 CAPLUS  
 CN Spiro[cyclopropane-1,12'-(12'aH)-pyrazino[1',2':1,6]pyrido[3,4-b]indole]-  
 1',4'-dione, 6'-(1,3-benzodioxol-5-yl)-2',3',6',7'-tetrahydro-2'-methyl-,  
 (6'R,12'aR)-rel- (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2009 ACS on STN  
 GI



AB The compds. represented by the general formula A-X-Y-Z-B [wherein A = (un)substituted cyclyl; X, Y, and Z = independently a bond or a spacer; B = (un)substituted hydrocarbonyl or cyclyl], or salts, N-oxides, solvates, or prodrugs thereof are prepared as mitochondria benzodiazepine receptors (MBR) agonists. For example, the compound I was prepared in a multi-step synthesis. I showed agonistic activity with  $K_i$  of 21 nM against MBR in rat. The title compds. are useful as a preventive and/or therapeutic agent for diseases attributable to stresses. Formulations containing the title compds. as an active ingredient were also described.

AN 2004:1154677 CAPLUS

DN 142:93686

TI Preparation of carbolinecarboxamides as MBR agonists

IN Ohmoto, Kazuyuki; Kato, Masashi; Matsushita, Takeshi; Katsumata, Seishi;

Manako, Junichiro

PA Ono Pharmaceutical Co., Ltd., Japan

SO PCT Int. Appl., 181 pp.

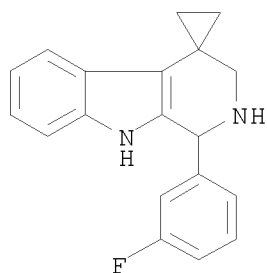
CODEN: PIXXD2

DT Patent

LA Japanese

FAN.CNT 1

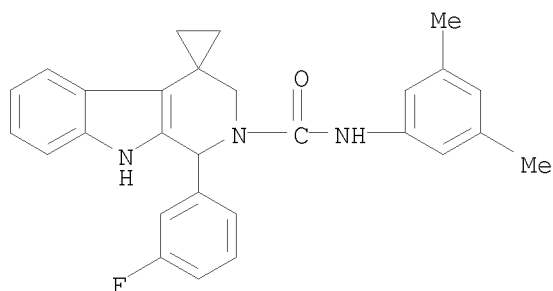
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004113300	A1	20041229	WO 2004-JP9071	20040622
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
				JP 2003-178436	A 20030623
EP	1637521	A1	20060322	EP 2004-746540	20040622
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
				JP 2003-178436	A 20030623
				WO 2004-JP9071	W 20040622
US	20060154944	A1	20060713	US 2005-561973	20051222
				JP 2003-178436	A 20030623
				WO 2004-JP9071	W 20040622
OS	MARPAT 142:93686				
IT	816428-14-5P 816428-22-5P 816428-44-1P 816428-45-2P 816428-46-3P 816428-54-3P 816428-56-5P				
	RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)				
	(drug candidate; preparation of carbolinecarboxamides as MBR agonists)				
RN	816428-14-5 CAPLUS				
CN	Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole], 1'-(3-fluorophenyl)-1',2',3',9'-tetrahydro- (CA INDEX NAME)				



RN 816428-22-5 CAPLUS

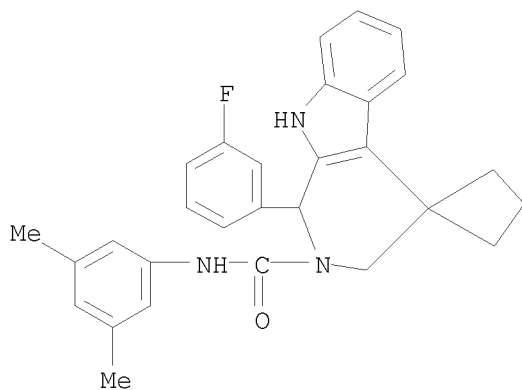
10561973

CN Spiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide,  
N-(3,5-dimethylphenyl)-1'-(3-fluorophenyl)-1',9'-dihydro- (CA INDEX NAME)



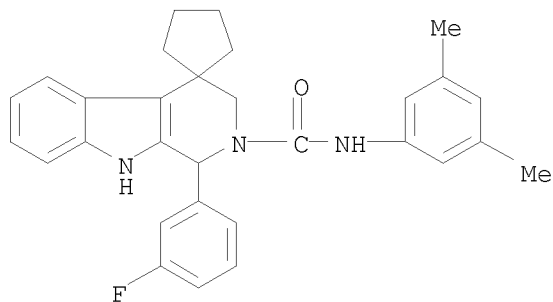
RN 816428-44-1 CAPLUS

CN Spiro[cyclobutane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide,  
N-(3,5-dimethylphenyl)-1'-(3-fluorophenyl)-1',9'-dihydro- (CA INDEX NAME)



RN 816428-45-2 CAPLUS

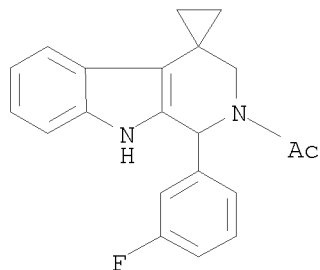
CN Spiro[cyclopentane-1,4'-[4H]pyrido[3,4-b]indole]-2'(3'H)-carboxamide,  
N-(3,5-dimethylphenyl)-1'-(3-fluorophenyl)-1',9'-dihydro- (CA INDEX NAME)



RN 816428-46-3 CAPLUS

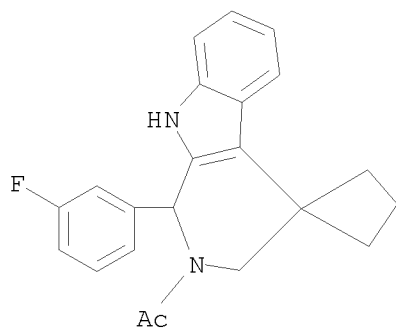
10561973

CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopropane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



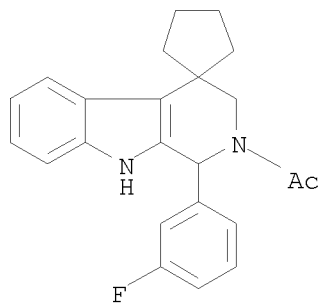
RN 816428-54-3 CAPLUS

CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclobutane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RN 816428-56-5 CAPLUS

CN Ethanone, 1-[1'-(3-fluorophenyl)-1',2',3',9'-tetrahydrospiro[cyclopentane-1,4'-[4H]pyrido[3,4-b]indol]-2'-yl]- (CA INDEX NAME)



RE.CNT 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

